1   What is claimed is:

2

3   **1.** A computer readable medium on which is embedded computer software, the software

4   comprising:

5   a base class that defines a parent-child relationship by which a child object is

6   stored within the storage space of its parent object;

7   an inline class, wherein the inline class is an extension of the base class and

8   wherein a member of the inline class is permitted to be a child object but prohibited from

9   being a parent object; and

10   a container class, wherein the container class is an extension of the base class and

11   wherein a member of the container class is permitted to be a child object and/or a parent

12   object;

13   whereby a well-formed document can be modeled in software using members of the inline

14   and/or container classes.

15

16   **2.** The computer readable medium of claim 1 wherein the document is a markup language

17   document.

18

19   **3.** The computer readable medium of claim 2 wherein the markup language is selected

20   from the group consisting of HTML, XML, XHTML and SGML.

21

22   **4.** The computer readable medium of claim 1 wherein the software further comprises:

23   an extension of the inline class.

24

25   **5.** The computer readable medium of claim 4 wherein the extension of the inline class

26   corresponds to a document item selected from a group consisting of comment text,

27   formatted text, embedded text, an image, an anchor, a paragraph marker, a line break and

28   a horizontal rule.

29

30

1   **6.** The computer readable medium of claim 1 wherein the software further comprises:

2   an extension of the container class.

3

4   **7.** The computer readable medium of claim 6 wherein the extension of the container class

5 corresponds to a document item selected from a group consisting of a bold text item, a

6 horizontally centered item, a table, a subdocument and a selection list.

7

8   **8.** The computer readable medium of claim 1 wherein the container class corresponds to a

9 document item in which other items can be nested.

10

11   **9.** The computer readable medium of claim 1 wherein the software further comprises:

12   an extension to an extension of the inline and/or container classes.

13

14   **10.** A method for use in developing a document-producing computer program, the

15 method comprising the step of utilizing a set of classes, the set of classes comprising:

16   a base class that defines a parent-child relationship by which a child object is

17 stored within the storage space of its parent object;

18   an inline class, wherein the inline class is an extension of the base class and

19 wherein a member of the inline class is permitted to be a child object but prohibited from

20 being a parent object; and

21   a container class, wherein the container class is an extension of the base class and

22 wherein a member of the container class is permitted to be a child object and/or a parent

23 object.

24

25   **11.** The method of claim 10 wherein the document is a markup language document.

26

27   **12.** The computer readable medium of claim 11 wherein the markup language is selected

28 from the group consisting of HTML, XML, XHTML and SGML.

29

30

1 **13.** The method of claim 10 wherein the set of classes further comprises:

2   an extension of the inline class.

3

4 **14.** The method of claim 13 wherein the extension of the inline class corresponds to a

5 document item selected from a group consisting of comment text, formatted text,

6 embedded text, an image, an anchor, a paragraph marker, a line break and a horizontal

7 rule.

8

9 **15.** The method of claim 10 wherein the set of classes further comprises:

10   an extension of the container class.

11

12 **16.** The method of claim 15 wherein the extension of the container class corresponds to a

13 document item selected from a group consisting of a bold text item, a horizontally

14 centered item, a table, a subdocument and a selection list.

15

16 **17.** The method of claim 10 wherein the container class corresponds to a document item

17 in which other items can be nested.

18

19 **18.** The method of claim 10 wherein the set of classes further comprises:

20   an extension to an extension of the inline and/or container classes.

21

22 **19.** The method of claim 10 wherein the utilizing step comprises:

23   linking to a library containing the set of classes; and

24   programmatically invoking an extension of the inline and/or container classes.

25

26 **20.** A computer readable medium on which is embedded a document-producing computer

27 program, the computer program comprising a product of a method, the method comprising

28 the step of utilizing a set of classes, the set of classes comprising:

29   a base class that defines a parent-child relationship by which a child object is

30 stored within the storage space of its parent object;

1   an inline class, wherein the inline class is an extension of the base class and

2   wherein a member of the inline class is permitted to be a child object but prohibited from

3   being a parent object; and

4   a container class, wherein the container class is an extension of the base class and

5   wherein a member of the container class is permitted to be a child object and/or a parent

6   object.

7